

From wang!elf.wang.com!ucsd.edu!info-hams-relay Thu Mar 28 15:49:20 1991 remote
from tosspot
Received: by tosspot (1.64/waf)
via UUCP; Thu, 28 Mar 91 21:01:03 EST
for lee
Received: from somewhere by elf.wang.com
id aa17594; Thu, 28 Mar 91 15:49:19 GMT
Received: from ucsd.edu by relay1.UU.NET with SMTP
(5.61/UUNET-shadow-mx) id AA15756; Thu, 28 Mar 91 10:12:17 -0500
Received: by ucsd.edu; id AA28072
sendmail 5.64/UCSD-2.1-sun
Thu, 28 Mar 91 04:30:32 -0800 for brian
Received: by ucsd.edu; id AA28061
sendmail 5.64/UCSD-2.1-sun
Thu, 28 Mar 91 04:30:27 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/
lqueue -oi -finfo-hams-relay info-hams-list
Message-Id: <9103281230.AA28061@ucsd.edu>
Date: Thu, 28 Mar 91 04:30:25 PST
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>
Reply-To: Info-Hams@ucsd.edu
Subject: Info-Hams Digest V91 #247
To: Info-Hams@ucsd.edu

Info-Hams Digest Thu, 28 Mar 91 Volume 91 : Issue 247

Today's Topics:

- a few fundamental questions about RF signals
 - Apartment & Heath HW-9 QRP CW xcvr?
 - Could we put QSL info online?
 - Ham interference on Cable TV?

Vacuum tube question/quest (Attn: 00Ts & gov't surplus fans) (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>

Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 28 Mar 91 03:47:05 GMT

From: swrinde!cs.utexas.edu!oakhill!nddsun1!waters@ucsd.edu

Subject: a few fundamental questions about RF signals

To: info-hams@ucsd.edu

In article <9171@plains.NoDak.edu> kkim@plains.NoDak.edu (kyongsok kim) writes:

}
} 1. Recently CATV interference was discussed. I wonder if the
} same RF signal can travel either through copper wire or through air. In
} other words, is there no difference between RF signal (say, for channel
} 4) that my TV receives from the air and RF signal (say, for channel 4)
} coming from CATV company through cable?

There is no difference in the signal at all, only the way it travels is different.

} 2. Are light and RF signals totally distinct or one and the same?
} For example, is visible light just an RF signal whose frequency is in the
} range of the frequency of visible light ?

Exactly correct. Of course the characteristics of the signal are different from say a VHF or microwave signal, but the differences are entirely due to the frequency/wavelength. There are also differences in the energy involved, especially when you get to X-rays and Gamma rays but they are all "electromagnetic radiation".

} To put this question another way, can we have an RF signal whose
} frequency is the same as that of visible light, but that is still
} distinct from light?

No.

} I may have more questions after I get answers to the above
} questions.

I would suggest reading a college level physics text on the subject, there really is quite a lot to it but its not difficult material. Unless you get into the Quantum Mechanics part, but thats probablyt more than you were interested in knowing.

} Thanks in advance.

You are welcome.

Date: 27 Mar 91 15:22:20 GMT
From: hpda!hpcuhb!hpindda!genem@hplabs.hpl.hp.com
Subject: Apartment & Heath HW-9 QRP CW xcvr?
To: info-hams@ucsd.edu

If you're not in a hurry, for the same amount of money, you may want to look into the Digitrex QRP rig. They have a kit for \$300.00 which is a 25w CW/SSB unit with: 6 digit freq readout, RIT, all ham bands inc. WARC bands, 1 .. 25w output (@ 12v/1A) so you can play QRP

It is housed in a very small package, about the size of a book. I am still awaiting delivery on mine (ordered 4 wks ago), but a friend who ordered it 11 months ago, has taken delivery (about a month ago) and is just about finishing it up. No report yet on the quality of the kit from a functional viewpoint.

The hardware looked very nice. The kit also includes about 10 surface mount ICs! One thing though, there were several parts missing (common ones: resitors, caps, etc.), which Digitrex supplied once they were notified. Also, for \$30.00, you can return the kit during the warranty period for any final fixing and alignment. Hopefully this won't be needed.

There is no doubt they had a lot of trouble getting this kit to market, but it looks like they will be over it soon. Also, they are not accepting orderers yet for the built version. I'm sure we'll be seeing more of this rig in future reviews. Digitrex can be reached at 313-853-3326.

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Date: 28 Mar 91 07:16:57 GMT
From: sdd.hp.com!usc!snorkelwacker.mit.edu!ira.uka.de!fauern!NewsServ!
buettneb@ucsd.edu
Subject: Could we put QSL info online?
To: info-hams@ucsd.edu

In article <21504@shlump.nac.dec.com> reisert@mast.enet.dec.com (Jim Reisert)
writes:

>RE: W6GO list

>

>I think the machine hosting the data would have to pay a subscription fee to
>W6GO, or something like that. I'm sure he doesn't provide this service to
>the PacketCluster (tm) users (sysops) for free. I guess people on the net
Indeed it is for free (at least doesn't cost money)! However, you
have to agree that W6GO's list is the only QSL info source available
on your node. No other QSL databases allowed besides W6GO's. At least

one of the local users or the sysop has to subscribe. That's what it was abot 12 months ago when I asked.

>could contribute to a fund, though, much like the Buckmaster tapes that >Rusty puts together.

I am the SysOp of DB0BCC PacketCluster node covering the Munich area. We have collected a lot of QSL information during the past 18 months. Initially somebody typed in W6GO's list - that's how we started. Today the database contains about 7000 entries. Recently I have cross-checked our database with Ulli, Y41VM, who has been collecting QSL info for a long, long time. We found that 76% of or database were identical with his, the remaining 24% are partly typos and sometimes really new. It should be kind of "clean" now since Ulli went through the 24% manually checking each entry validating DX call and manager. All obvious errors have been deleted.

If anyone really wants to take up this task, I will offer this database. Someone will have to keep track of latest DX, update the database regularly etc. And THAT is a lot of work!

73 Ben, DL6RAI

Date: 28 Mar 91 07:47:24 GMT
From: sdd.hp.com!spool.mu.edu!news.cs.indiana.edu!ux1.cso.uiuc.edu!phil@ucsd.edu
Subject: Ham interference on Cable TV?
To: info-hams@ucsd.edu

karn@epic.bellcore.com (Phil R. Karn) writes:

>I don't know if my experience is typical, but the hardest problem I
>had in getting some local CATV leaks fixed was finding the right
>people within the company to talk to. In my case, the problem was with
>some hardline connectors on an amplifier on a pole, not with a
>customer drop. The regular customer service people haven't a clue, and
>of course the installers don't deal with the feeder facilities.

You might try the tact of calling the cable company and pretend to be a salesman of some sophisticated engineering equipment (not a customer or anything else the customer misserver department considers their turf).

>In my case, I was reading 8 microvolts of HBO sound carrier on the
>terminals of my 2m satellite antenna when it was aimed at the
>offending connection - over 500 feet away! It took a threat to notify
>the FCC to get them moving, but they finally did fix the problem. It
>turns out they have a special crew that maintains this part of their
>plant, but they seem to keep its existence a secret.

Back when I lived in NJ, fussing with the cable company there eventually led to a phone call to the corporate office in Houston and a conversation with the assistant to the vice-president of engineering who had been on the job only 1 week when I reached him. Three days later a special engineer came in from CT (CT plates on the van) and has some top notch test equipment and checked levels. All I was having was a levels problem, but it was very bad. He agreed they were bad. The next day the local chief engineer called to make an appointment. A tech came out a couple days later and replaced the entire feed to the apartment building. The problems were fixed. The tech also happened to ask what kind of "pull" or "connections" I had, as he'd never been assigned a service call by the chief himself before :-)

>Ham clubs ought to develop standing contacts with their local CATV
>companies so they know who to call when these things happen. It would
>be far better if these problems could be handled on an amicable,
>cooperative basis, without having to threaten to involve the FCC.
>After all, bad feeder connections also affect picture quality (by
>introducing standing waves) so the CATV companies ought to have an
>incentive to fix them. Rather than look at the hams as an annoyance,
>the CATV companies should see them as a valuable resource - groups of
>technically skilled people willing to locate leaks for free.

I fully agree. One or two people should be the designated representatives so that they can have full access to cable company personnel, private phone numbers, etc., without the cable company worrying that those things get out to everyone. To get the cable company to rely on the service by hams, it will have to be shown to be reliable. If well organized this will be easy.

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/*****\
/ Phil Howard -- KA9WGN -- phil@ux1.cso.uiuc.edu      \
\ Lietuva laisva -- Brivu Latviju -- Eesti vabaks      /
\*****/
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Date: 28 Mar 91 04:02:29 GMT
From: gsm001!gsm@uunet.uu.net
Subject: Vacuum tube question/quest (Attn: 00Ts & gov't surplus fans)
To: info-hams@ucsd.edu

slp9m@cc.usu.edu asks:

>

>I have a Navy surplus LF/VLF/MF receiver (14 to 600 kHz), type AN/FRR-21.
>It was operational when I purchased it but has since died. I traced the
>problem to a dead tube.

>

>The tubes are tiny little things with wires for pins. They are held to

>circuit boards with clips and the "pins" are soldered onto terminal posts.
>I have a manual and it designates the tubes with numbers like 5899, 5636,
>5719 or 5840 (it's the 5840 that's dead).

.....

>

>Another question arises. When I had the receiver open looking for the
>problem, it became apparent that figuring out which "pin" was which on one
>of these little guys could be very difficult. Is there some trick to
>figuring these tiny tubes out that someone would care to share with me?

I haven't seen these things in years, so my memory is quite sketchy.

I believe tube numbers were standardized in the 30's with us numbers being

nTTxxm

n being the number of elements (including the filament) therefore:
diodes were 3, triodes were 4, etc, dual triodes were 7.

TT was a type designator all I remember is that L were audio amplifiers.

xx was a numeric designation to keep different types of the same nTT combination
separate.

mm was a modifier such as a (second version) b (third version), GT glass tube.

i.e.

6L6GTA was a pentode audio amplifier with a glass tube (second version)

Non filament tubes used 0 as element count:

0A2 was a voltage regulator (argon gas lamp actually)

0B1 was a a Geiger-Muller (radiation detector) tube.

European tubes use a completely different system except that most begin
with EC (but I think that started in the 60's)

Tubes made before the 30's were just assigned numbers such as 1, 2, 3,
etc. They varied from manufacturer to manufacturer, but were eventually
standardized.

Special tubes used anything the manufacturer felt like.

Transmitter tubes use a standard different from the rest.

and 60's along with vttnn series of number, eg, 6sn7, 5y3, 12au7 etc etc, there was a entirelyly numeric set of tubes, eg 5879 (almost a 6sj7), 8058 (almost a 12at7) etc etc.

- 2) I'd suggest you find a copy of an early 1960's AARL Radio Amateurs Handbook, or a copy of again an early 1960's RCA Receiving Tube Manual - you'll find your tubes listed there. This way you can find out what the tube you're looking for is, eg, triode, pentode, what type of characteristics, and pin-out. Armed with this, if you can't find someone with the tube you want, you'll be able to ask for an "vttnn" equivalent, eg, if your tube is a 7 pin sharp-cutoff pentode w/ grid 1 on pin 1, grid 3 on pin 2, a 6.3v heater on 3 & 4, the plate on 5, grid 2 on 6 and the cathode on 7 -- you might try a 6au6 in it's place, or if you need a remote-cutoff pentode with the same pin out you might try a 6ba6 etc etc.

best of luck,

=greg

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"No government governs like no government" and/or
"Life begins at 10,000 feet"

--- And of course, my opinions are my own and surely not my employer's -----

End of Info-Hams Digest
